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Titles: DOT

ABSTRACT

This document is designed as a workbook for those planning to conduct labor market surveys. The data gathering procedures were specifically designed for a small rural college with limited financial and manpower resources. The purposes of such a survey are to identify manpower needs, to make the college known as a source of trained manpower, and to acquaint vocational instructors with local employers and jobs performed. A step-by-step description of the process of conducting a labor market survey is provided, as is a glossary of terms, a list of groups to be contacted, a list of materials to be developed, sample data collection forms, a list of computer table headings and column designations, a detailed description of the computerized Dictionary of Occupational Titles (DOT) system and its use, a list of two-digit industrial codes, and a bibliography. Brief descriptions of the method used to conduct a survey at Columbia Junior College (California) and the results obtained are also included. (DC)

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LABOR MARKET IDENTIFICATION MODEL

Procedure in Labor Market Planning for Vocational Education Programs of Columbia Junior College October 1974



A. General Approach

the identification of state and federal statistical publications decisions can be made. Attention has been given to developing which provide common data available for a defined geographical This publication presents an approach designed for instiinstitution with limited financial and manpower resources and tutions in rural, isolated, sparsely populated areas by which data gathering procedures which can be undertaken by a small they can gather labor market information upon which program

B. Objectives of the Labor Market Survey

- To identify the nature of the jobs performed in the selected survey area in order that: B.1.
- B.1.1. Students can receive accurate information relating to possible careers.
- .1.2. Instructional development can parallel available job needs.
- B.1.3. Implications for future program development can be identified.
- B.1.4. To identify potential cooperative education stations.
- B.2. To make known the college as a source of trained manpower so that
- B.2.1. Students can be placed in field of training.
- B.2.2. The college can assist in the development of the local economy.
- B.3. To acquaint vocational instructors with local employers and jobs performed in order that
- B.3.1. Classroom instruction accurately portrays work situations found in the local environment.

Data Forms

See Attachments

- B.3.2. Contacts with local employers can be established.
- B.3.3. Potential sources of advisory assistance can be identified.

. Description of the Surveyed Area

G.1. Limited number of large companies which can absorb students into their work force with a coupled educational program.

There are a limited number of large companies or corporations which can absorb students into their work force with a coupled educational program. Where colleges in metropolitan communities can concentrate their efforts with a few large employers, colleges in sparsely populated areas must scatter these arrangements through many more agencies and organizations because of the limitation of scope available and often must communicate with decision levels of the participating agencies which are located outside the hiring area.

C.2. The local economy is primarily made up of small businessmen, the nature of whose businesses do not allow for an expansion of their work force beyond the current level.

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- 6.3. The primary source of employment is through government related work for which there is no single employer but a variety of employment programs for which recruiting is done outside the community.
- C.4. Much of the work available is of a seasonal and/or parttime nature.
- forces young people to either join the large pool of unskilled high rate of unemployment among the general population which Economic conditions are generally depressed by virtue of a labor or leave the community if they are to secure entry c.5.
- trained workers to the community, local businesses have yet C.6. Because the College is new and the first and only source of to consider it as a place for recruitment.



In addition to these broader problems, prior to the development of Columbia Junior College six years ago, the only access to vocational training programs at the post secondary levels was to attend colleges outside the county at some distance away. Because the college is a new entity, it has not been considered as a source of trained manpower. This required modification of previous recruitment methods for trained personnel so that existing job opportunities can be captured for students enrolled in the vocational programs of the college.

D. Description of the Survey

D.1. Nature of the survey

The survey was aimed at determining the number of employees, the nature of their work, the career jossibilities and the requirements for each job.

The size of each business is defined only according to the number of employees. Questions are asked about the nature of each job slot in terms of how many performed the same job, the work schedule of each employee in the job slot, whether the job was entry and/cr career level, and the promotional possibilities. Further questions include educational and experience requirements, licensure, physical condition, age and sex requirements and possibilities for handicapped workers in the job. A final question determined from where employers currently recruited employees.

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Each set of quastions is designed to describe each job performed; therefore, more than 2 employees could be accounted for on each survey sheet.

D.2. Rational for Scope of Survey

The counties served by the college are not a part of a larger labor market reporting area or Standard Metropolitan Statistical Area and therefore, limited information concerning the area as a whole is regularly reported. Because detailed information for specific employers is not available to the college from the Employment Development Department, a comparable data base ior all counties served is required. Such a data base requires that all businesses are surveyed.

D.1. Glossary of Terms

ERIC

Sources of Related Data

E.1. Basic list of businesses to be surveyed

- E.1.1. Promotional organizations maintain a list of potential members and thus provide a source of business to contact. This list must be supplemented as the survey proceeds as it is not complete.
- E.1.2. Consultation of telephone book

The yellow pages provide a listing of businesses having telephone numbers.

E.1.3. Equalization Board of State of California

New businesses coming into the county must file for a license to sell through the State Board of Equalization.

E.1.4. Publication of businesses doing business under a name other than the owner

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Notices of intent are filed with the County Clerk and published in the local newspaper.

E.2. Employment Development Statistics (local)

Occasional studies are done by staff from the Employment Development Department for local offices. Statistics are gathered which can be used. Reports of this type are usually undertaken for special local reasons and therefore do not provide a standard reporting format for all labor market areas.

E.3. Employment Development Statistics (state-wide)

The Employment Development Department maintains a Research and Analysis Office in San Francisco. This office provides local and standardized data forms upon request. This office also provides information based on the 1970 Census.

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E.4. 1970 Census Data

Characteristics of the Labor Force can be secured for each County from various publications detailing Census information.

E.5. Surveyors Knowledge of the Community

The personal knowledge of the survey team members also prove helpful. Occasionally business owners were reluctant to give information, and knowledge of local situation helps fill in blank spots or enables surveyors to find the needed information elsewhere.

F. Uses of the Data

F.1. Curriculum development

F.1.1. Implications for existing program

The relationship of current and projected manpower needs can be established and needed modifications, deletions and expansions can be identified and developed within the college. The relationship of college program with program of other training agencies can be identified and articulation between institutions and programs strengthened to assure that duplications nor gaps exist.

Educational procedures, facilities, and equipment can more closely reflect actual practice.

F.1.2. Implications for new program development

Long-range planning for needed program additions can be undertaken to include staff, facilities, program, financial resources, and community agreements. The relationship of this program to overall college needs can be assessed.

The relationship of anticipated college program with future program plans of other local and regional training agencies can be identified to

E.4.1.List
of useful
Census
Data



assure that duplications of expensive programs do not occur and gaps do not exist.

F.2. Manpower Planning Agencies

- F.2.1. City, County and State government request that the information be made available to them for their own studies. As manpower planning becomes an ever increasing necessity for these entities, data concerning needs and programs must be considered in the overall allocation of manpower revenue-sharing funds.
- F.2.2. Economic planning agencies also require information concerning the actual labor market as it relates to the economy as a whole.
- F.3. Identification of potential cooperative work experience stations and career placements for trained personnel

One of the drawbacks in most vocational programs is that jobs within a business. A Labor Market Survey conducted deficiencies. When the instructors talk to employers at if he is to place his students into jobs, know what each nesses in the community for which they are training stujob requires, how the business operates, and who to coninstructors lack time to become familiar with the busidents. They may not understand the internal working of by these teachers will help them overcome many of these managers, or workers, or, perhaps, requirements of many This personal communication is essential to the teacher their places of business about their employees and how the businesses operate, a mutual understanding can be generated which will help both teacher and employer. many of the businesses, personally know the owners, tact when a student is ready for employment.

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Identification of business which can provide training experiences not available at the college is possible by personal contact and knowledge of potential training facilities. Cooperative agreements can then be developed.

7.2.List of concerned groups in community

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As a counseling tool

- F.4.1. The sharing of program information between instructional and counseling staffs is imperative if students are to be attracted to and enrolled in programs with potential for career placement. This sharing process must occur within the institution and between institutions and agencies concerned with the training and placement process.
- F.4.2. Career information for students is an approach of local labor market information. This includes characteristics of the job as well as potential for placement.
- F.4.3. Career placement procedures can be strengthened through an organized approach to the labor market.

F.5. Professional development of vocational staff

- F.5.1. Strengthening skills in manpower needs assessments and job analysis for vocational staff results from on-site visitation and analysis of the data.
- F.5.2. Strengthening skills in program development and instructional design through first-hand knowledge of work situation and employer needs.
- F.5.3. Maintaining knowledge of current practices in local and expanded labor markets so training does not become obsolete.

F.6. Public Information

F.6.1. Mass media

Building an awareness of the public as a whole and students' parents in particular.

F.6.2. Civic groups including promotional organization

Building an awareness of the public as a whole through program presentation and speaker services.

F.4.1.List of groups to be reached F.4.2.Types of Career Materials to be

developed

Form

G.4. Data

Collec-

tion

Instru-

ments.

b. travel arrangements

c. scheduling of visits and compensation for time involved

The faculty involvement in the project required that each surveyor arrange his schedule for pay and time in the field as best suited his situation.

Alternatives utilized included

a. reassigned time--substitutes

were hired to cover assigned

classroom duties while instructor was in field

- b. reassigned time--field time was assigned as part of full time load
- c. instructors were paid on an hourly overload basis in excess of their full time load
- d. a contract rate was established to carry out a given amount of work

Printing of business

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cards

Each surveyor is provided with an identification card when he approaches an employer. A standard business card is most appropriate and easy to handle. Many employers are ill at ease when approached because they feel some of the questions are personal. A short discussion of the reason for the survey roupled with some proof as to who surveyors represent, eased tension.

Use college transportation or individual car with reimbursement for mileage and meals.

Coordinated through regular college transportation procedure '

Project Coordinator and faculty member working with Dean of Instruction and Associate Dean for Occupational Education.

Project Coordinator G.4.2. and Instructional Busines Materials Center Card



G.1.4. Develop data processing

survey sheets for key punching of information, a consistant schedule for forwarding the Because of the quantity must be met.

key punch operator and programmer Frequent communications with the is necessary to assure both data processing and survey needs are

The program is designed so that Job title and DOT code data can be arranged by: classification employer

Computer

Heading Table

List of

.4.3.

Hand sorting to arrange information by curricular area is also used.

According to staff training directions.

Review data sheets for

G.1.6.

12

coding and accuracy

Complete survey sheets

G.1.5.

Two codes must be assigned to DOI code (Dictionary Occupational Titles) Standard Industrial Classification Code each job title:

necessary that each surveyor turn in the sheets as they are accumu-Because there are so many sheets to be coded and verified it is

difficult than at first apparent, and of warning, this coding is much more and eye for detail is necessary for and verify the sheets and perform in coding one person should code someone with exceptional ability other clerical duties. One word In order to maintain uniformity the task.

and data processing Project Coordinator staff

Surveyor

Project Clerk

Standard fication Explans-DOT and Classition of Industrial G.4.4.

Code



(1) the instructors do not have the is impractical for several reasons;

Using instructors to do this task

much more proficient at coding and

consistency could be maintained,

time, (2) one person would become

and (3) it is far too expensive to

have certificated staff perform

program printouts Keypunching and

this kind of time-consuming clerical As noted above, data was summarized function.

by Job title and DOT Code by four classifications:

by Standard industrial Classification -- industrial type

by employer

by curricular area

Within any of these categories, following sorts were possible: by DOT number and title

by locale

by employer type ပံ

by career level

for special target groups by eligibility

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women

aged

mentally and physically handicapped

work calendar

length of work day

Gather standard statistical

G.1.8.

data for inclusion in

report

Train staff in techniques for analysis of la or

G.1.9.

market data

Secure documents to use in manpower projections and organize for report narrative.

in Analysis of Labor Market Survey will work with the staff on skills necessary A workshop session for all instructors Involved in developing implications is lating basic analysis data to the parrequired at which time the consultant Surveys. After a general session reticipants as a group, the consultant to derive meaning from Labor Market

Data Processing Services

G.4.5. List Project . Jordinator

data avail

able for

of useful

all coun-

ties.

Project Coordinator Survey Staff Consultants

power pro-G.4.6. Useful manjection

works with each participant individually to assess the data pertaining to each vocational program. This individual activity will be of a clinic nature to assist participe a to overcome problems encountered and improve the quality of the work done.

G.4.7. Work sheets uti-

lized in developing

frplications.

Each instructor will prepare a summary of implications for their vocational area.

The Project Coordinator will need to compile and edit data prepared by instructional staff and integrate community characteristics and manpower projection information into the detailed review of data.

labor market description

Integration of program

G.1.10.

See Section F, Uses of Data

Completion and printing

of report

1 4

See Section F.

Identification of target groups for dissemination of information

G.1.12.

of dissemination format

Updating survey

G.1.14.

Design and development

G.1.13.

Several techniques have been utilized to update survey information.

a. Use of employer roster as mailing lists.

Project Coordinator

Project Coordinator Project Clerk Instructional Material Center Associate Dean of Occupational Education, Vocational Faculty, College Administration Associate Dean of Occupational Education, Associate Dean for Community Services, Public Information, Instructional

Career Placement Assistant



Throughout the year, programs have been developed to meet the special needs of employers resulting from the survey. Address labels are printed by the computer from the bank generated from the survey instrument. These are used for program announcements. Return receipts are requested for all mail that cannot be delivered. Employer address cards are then pulled from the working file.

- b. Review of legal motices in newspapers.All businesses whose name is not the actual name of the employer
- All businesses whose name is not the actual name of the employer must file a legal notice indicating also known as. The daily review of these legal notices allows for the addition of new businesses to the file.
 - C. Review of classified ads. Daily review of job openings will also reveal new employers entering the community.
 - d. Occasional check with Board of Equilization.
 All individuals wishing to do business in a community must file with the Board of Equilization.

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D.1. Glossary of Terms

- 1. Labor Market All jobs performed within a given geographical area.
- 2. Types of Labor Market reporting areas
- a. Census tract

with the intention of being maintained over a long time so that comparisons average tract has about 4,000 residents. Tract boundaries are established have been divided for statistical purposes. Tract boundaries were estab-Census tracts are small areas into which large cities and adjacent areas Tracts were generally designed to be relatively uniform with respect to lished cooperatively by a local committee and the Bureau of the Census. population characteristics, economic status, and living conditions. may be made from census to census.

- b. By County
- c. By Standard Metropolitan Statistical Area (SMSA)

or "twin cities" with a combined population of at leas. 50,000. In addition counties are included in an SMSA if, according to certain criteria, they are A Standard Metropolitan Statistical Area is a county or group of contiguous counties which contains at least one city of 50,000 inhabitants or more, to the county or countles containing such a city or cities, contiguous socially and economically integrated with the central city.

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- on either a full-time, part-time, year-round and/or seasonal basis. given job title x the number of workers assigned to that position Job Slot - For the purposes of this survey a job slot was considered to be a
- DOT Code Dictionary of Occupational Titles Code See G.4.4.
- 5. SIC Standard Industrial Classification Code See G.4.5.



E.4.1. List of Useful Census Data by County

Page 1 - General Characteristics of the Population: 1970

Page 2 - Social Characteristics of the Population: 1970

Page 3 - Labor Force Characteristics of the Population: 1970

Page 4 - Income Characteristics of the Population: 1970

If working on ethnic characteristics, see also

Page 5 - General and Social Characteristics of the Negro Population

Page 6 - Economic Characteristics of Negro Population

Page 7 - General and Social Characteristics of Persons of Spanish Language or Spanish Surname Page 8 - Economic Characteristics of Persons of Spanish Language or Spanish Surname: 1970

F.2. List of Concerned Community Groups

Local Office of Employment Development Department
County Schools office staff

ROP-ROC program staff
Secondary Schools staff
County Board of Supervisors - Manpower Planning Council
County Planning staff
City Planning staff
City Planning staff
Economic Development Planning Council
District Occupational Advisory Committee
Regional Occupational Advisory Committee

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ERIC Full Text Provided by ERIC

F.4.1. List of Groups to be Contacted

Manpower Planners - Manpower Planning Council of Board of Supervisors Overall Economic Development Planning Employment Development Department

Counselors - Secondary Schools Colleges ROP-ROC Welfare and Employment Development Department

Program Administrators - Secondary Schools Colleges County Schools Vocational Instructors - Secondary Schools Colleges

Career Information Personnel - Elementary
Secondary
College
ROP-ROC

Job Placement at Secondary and College Levels Employment Officers - Employment Development Department Private Employment Agencies

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Students

Parents

Governing Boards - responsible for program decision-making

Advisory Committee Members

- F.4.2. Career Materials to be Developed
- 1. Labor Market Report



- 2. Audio-visual overview of the characteristics of the labor market
- Materials relating to the types of jobs performed in the local environment m

Ø
rument
Inst
ection
Co 1.1
Data
.4.1.





MILDRED SCHICK HOSPITALITY MANAGEMENT

COLUMBIA JUNIOR COLLEGE P.O. BOX 1849. COLUMBIA. CALIFORNIA 98310 TELEPHOTE (209) 332-3141

4.3. List of Computer Table Headings and Column Designations

A. Tables Arranged by DOT Code and DOT Number

characteristics, licensure requirements, and education and experience levels summarizes the number in each job title, part time, full time and seasonal This information forms the basis for Tables numbered XXVIII in Part II. Job Characteristics by DOT Code and DOT Job Title Table I.

Entry Level Jobs by DOT Entry Code and DOT Job Title - also shows future placements and future possibilities for cooperative work experience. Table II.

required.

opportunities in each curricular area in Part II. It also provides information on career advancement possibilities and also next rung on the career ladder. This table serves as the basis for discussions pertaining to entry level It identifies potential cooperative work experience stations.

7.C

Calendar of Seasonal Jobs by DOT Code and DOT Job Title Showing Source of Recruitment, This table identifies seasonal jobs, avenue of recruitment and seasonal calendar. This table provided the data for the seasonal calendars which appear in each Part II of the detailed Labor Market Analysis. section of

B. Tables Arranged by HRD Class

Table IV. Summary of Jobs by HRD Class

sorts allow for comparison with cansus data and with like industrial groups. These tables provide information to allow for sorting by HRD class and to These develop relationships with the Standard Industrial Classification.

Summary of Entry Level Job Titles and DOT Codes by HRD Class

This table provides information which allows for clustering of job titles into HRD classes to compare with census information. C. Tables Arranged by Employer Name within HRD Classes

Job Titles by Employer by DOT Title and Code, by HRD Class and by Size of Organization, Table VI.

These tables provide the data upon which Tables XXVI and XXVII on Pages 48 and 50 of Part II were developed.

Job Titles of Entry Level Jobs by Employer by HRD Class. Table VII.

It provides This table is the same as Table V but sorted by employer name. This information will be useful for future placement services. information for entry level jobs for curriculum analysis.

Entry Level Jobs which Lead to Career Level Jobs by Employer by DOT Title and Code with Future Possibility for Cooperative Work Experience Slots. Table VIII.

This table provides information on advancement opportunities by employer. It will be useful for future career selection and placement information.

Calendar of Seasonal Jobs by Employer by HRD Class Showing Source of Recruitment. Table XIX.

This information is similar to that on Table III; however, it gives names of employers who hire seasonal workers. This information will be helpful in providing placement services.

G.4.4. Dictionary of Occupational Titles

DICTIONARY OF OCCUPATIONAL TITLES

Background

To provide a comprehensive cross section of information about occupations The development of the Dictionary of Occupational Titles began with number of occupational research centers were established in various secformed U.S. Employment Service and affiliated State employment services. as they actually existed, job analysis techniques were developed, and a the passage of the Wagner-Peyser Act in 1933 which created a need for a reliable source of occupational information for personnel of the newly tions of the country.

of occupational information on the American economy. They form the basic ration of a variety of publications, and made possible the publication of can be identified and measured. They provided source material for prepathousands of establishments, providing the first extensive compilation data from which subsequent technological change and its effect on jobs a volumne of brief descriptions of all jobs for which information was Between 1934 and 1939, 54,000 analyses of jobs were prepared in available--a dictionary of occupations. The publication in 1939 of the Dictionary of Occupational Titles provided a useful tool for the understanding of job content and job relationships and for all future work in occupational research.

tionships based on work performed and job content, it was useful in classifying employers' job orders and applicants seeking employment who had a history of the U.S. Employment Service. This review resulted in a new occupational the basis for a review of the occupational classification and code system The information gathered for publication in the Dictionary served as classification structure. As this structure reflected occupational relaof work experience.

The Dictionary had become a standard source of occupational information in the broad area of manpower and related fields. An attempt to develop an improved classification system to meet various demands in these areas more the traditional work performed but also in terms of the requirements made effectively, and to reflect relationships among jobs not only in terms of on the workers, resulted in new occupational research techniques.

Arrangement of the Dictionary

arrangement of job titles and definitions, (2) methods of locating a job This section provides an explanation of (1) the presentation and definition and code, and (3) the various uses of the Dictionary.

1. Presentation and Arrangement of Job Titles and Definitions

are 35,550 job titles, and, although not every one is followed by a The definitions contained in volumne I of the Dictionary are arranged in alphabetic order according to their job titles.

U.S. Department of Labor Manpower Administration, Dictionary of Occupational Titles - 1965, Volumnes I, II, and III

a. Job Definitions

The Dictionary of Occupational Titles (Third Edition) Volumne I contains names and definitions of the various occupations in the economy.

1) Titling

Jobs are arranged according to the alphabetic order of their titles. Other names by which the same jobs are known in various sections of the country are called alternate titles and are also included. Alternate titles are incorporated alphabetically with the other titles and refer the reader to the title under which the definition is printed. Jot titles are letter alphabetized; i.e., the entire job title is considered as a single word for alphabetization purposes.

2) Content

Data contained in the definitions include information on WHAT gets done, HOW it gets done, and WHY it gets done.

CATALOGER (library) 100.388. catalog librarian: descriptive catalogas	Compiles information on library mater-	ials, such as books and periodicals,	and prepares catalog cards to identify	materials and to integrate information	into library catalog: Verifies author.	HOW title and classification were
EXAMPLE:			WHAT		WHY	

The definitions also provide, indicate, or imply other types of information:

are designated relationships to Data, People, and Things which are used in the Dictionary to identify the levels Functions performed by the worker. (Worker functions at which the job requires the worker to function.) <u>e</u>

SYNTHE-

PHYSICIST, THEORETICAL (profess. & kin.) 023.088. Interprets results of experiments in physics, formulates theories consistent with data obtained, and

predicts results of experiments designed

Significant aptitudes, interests, and temperaments required by the job. (Aptitudes are those specific capacities and activities required of a worker in order to perform a and temperaments relate to certain types of occupational job adequately. Interests are those factors that indicate a positive preference for a type of work activity, sftuations to which workers must adjust.) to detect and..... SIZING 3

EDITORIAL WRITER (print. & pub.) 132.088. Writes coments on topics of current (aptitude) EXAMPLE:

opinion in accordance with viewpoints VERBAL ABILITY interest to stimulate or mold public PEOPLE AND THE and policies of publication.... · (interest)

COMPUNICATION OF

(temperaments)

IDEAS, AND FACTS IN TERMS INTERPRETING FEELINGS, OF PERSONAL VIEWPOINT INFLUENCING PEOPLE'S OPIN-IONS, ATTITUDES, OR JUDG-MENTS ON IDEAS

performance, and working conditions are physical surroundcal demands are specific physical aspects required in job ings in which specific occupational activities occur.) Critical physical demands and working conditions. છ

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EXAMPLE:

HIGH CLIMBER (logging) 949.781. climber; high rigger; rigger; squirrel man; topper.

(working Installs blocks (pulleys), cables, and conditions) other rigging tackle on tree to be used OUTSIDE, for yarding logs from forest: Climbs HAZARDS tree, using climbing spurs and safety

(physical rope....demands)

CLIMBING AND BALANC-

crete occupational picture which also will convey some indication The complete job definitions, with information on the WHAI, HOW, and abilities required, are designed to give a concise and conand WHY of the job, as well as indications of the knowledges of the level of complexity involved.

Volumne II of the Dictionary contains the index of the industry designations, their complete industry titles and definitions, and an alphabetic list of occupational titles occurring in each industry.

3) Industry Designation

There are 229 industries defined in the Dictionary. Each is identified by a designation which is usually an abbreviation of the name of the industry. Each job definition is assigned one or more of these designations, which immediately follow the job title, for the purpose of indicating the type of economic activity with which the job is associated. They also serve to differentiate among identical titles in different types of activities.

Several bases have been used for determining what the various industries will include: (1) The character of the services rendered, as in amusement and recreation services; (2) the products manufactured, as in the rubber tire and tube industry; (3) the primary processes employed, as in the nonferrous metal smelting and refining industry; (4) the raw materials used, as in the stonework industry.

A definition usually receives the designation of the industry in which the job is found. However, if the job is one of a group that occurs in several industries because the work activities involved are not peculiar to any single industry, it is given the designation of the particular type of activity.

A number of jobs occur in more than one industry but do not fall within a type-of-work designation. Such jobs bear the industry designations of the several industries in which they are found, unless they occur in a number of industries too large to be conveniently listed, in which case they are given the designation "any ind." (any industry).

In compiling the information of the Dictionary, not every job was observed in every industry in which it existed. For this reason, the assignment of an industry designation does not necessarily limit a job to that industry. These designations are merely indicative of the possible areas of activity in which the job may be found.

2. The Occupational Classification and Code

The occupations in the Dictionary have been incorporated into a classior worker trait characteristics so that the user can discern various rela-6-digit numbers. The structure consists of two arrangements of jobs--the provide (1) a method of grouping those having the same basic occupational Occupational Group Arrangement and the Worker Traits Arrangement. These fication structure in which the individual occupations are identified by tionships among occupations, and (2) a standard approach to classifying the abilities, vocational experiences, and/or potentials of workers.

a. Occupational Group Arrangement

service, genetic term, and/or industry, as reflected in the first three digits of the code. All occupations are grouped into nine broad cate-Throughout this arrangement, jobs are grouped according to a combination of work field, purpose, material, product, subject matter, gories, which, in turn, are divided into divisions and then groups. The nine occupational categories of the occupational group arrangement are identified by the numbers 0-9, reflected in the first digit of the code number as follows:

Professional, technical, and managerial

Clerical and sales occupations

Service occupations

Farming, fishery, forestry, and related occupations

Processing occupations

Machine trades occupations

Structural work occupations Bench work occupations

Miscellaneous occupations

and the divisions, in turn, are subdivided into 603 distinctive 3-digit These categories are divided into eighty-four 2-digit divisions, groups. Definitions of the categories, divisions, and groups are presented in that section of volumne II of the Dictionary entitled "Occupational Group Arrangement of Iltles and Codes."

Worker Traits Arrangement

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Each group contains (1) narrative information identifying vocational preparation, aptitudes, interests, temperaments, and physi-Throughout this arrangement, jobs are grouped according to some combination of required general educational development, specific traits and abilities required of the worker, and (2) a listing of occupations which require these factors in common. cal demands.

There are 114 such worker trait groups, organized within the following broad areas of work:

Investigating, Inspecting, and Farming, Fishing, and Forestry Counseling, Guidance, and Education and Training Business Relations Social Work Elemental Work Clerical Work Entertainment Engineering Crafts

Managerial and Supervisory Work Photography and Communications Mathematics and Science Law and Law Enforcement Medicine and Health Personal Service Transportation Merchandising Machine Work Writing Music

Testing

Each worker trait group is defined by presenting narrative informapicture of typical training and methods of entry pertinent to the jobs tion that describes the work performed, identifies significant worker requirements, suggests possible clues that may be useful in relating applicants for employment and the requirements, and gives a general listed in the group.

3. Uses of the Dictionary

Armed Forces it is used in identifying and summarizing recruits' civilian in a commonly understood language among State and local offices. In the adapted, modified, and incorporated into military classification systems ers' job openings in the same terms, and to communicate this information ratings which are related to their civilian skills or in line with their to classify and code applicants' occupational qualifications and employpotential, and in defining and classifying military positions which are terminology of occupations. This permits the State employment services work histories, in assessing personnel to military classifications and identical or similar to those found in civilian industry. It has been and numerous operating personnel manuals. The Dictionary is used in developing an orderly procedure for granting occupational deferments The Dictionary provides a reliable means of standardizing the in the operation of a nationwide Selective Service System.

results in Dictionary terms; one means of measuring technological change action programs are based on the results. The Dictionary also provides Universities, independent research organizations, government, and various groups concerned with manpower planning and related activities use it as a basic tool in occupational research. Job inventories are con-The U.S. Employment Service uses the Dictionary in its statistical shifts among job methodologies; extrapolation of these trends permits reporting of information for economic analysis and manpower planning. forecasting and evaluating occupational supply and demand. Manpower a standard terminology and an occupational classification system for ducted by identifying and counting job or workers and reporting the is to repeat this procedure at different time periods and note the relating results of independent research projects to each other.

Purpose and Scope of the Classification

at a single physical location where business is conducted or where services For purpose tation, and analysis of data relating to establishments; and for promoting collected by various agencies of the United States Government, State agenengaged; for purposes of facilitating the collection, tabulation, presen-The Standard Industrial Classification was developed for use in the of this classification, an establishment is an economic unit, generally classification of establishments by type of activity in which they are uniformity and comparability in the presentation of statistical data cies, trade associations, and private research organizations. or industrial operations are performed.

from a classification for enterprises or companies. A Standard Enterprise Classification related to the Standard Industrial Classification has been developed for use in classifying enterprises. Other classifications have been developed for use in the classification of commodities or products The Standard Industrial Classification for establishments differs and also for occupations.

trapping; mining; construction; manufacturing; transportation, communication; The Standard Industrial Classification is intended to cover the entire insurance, and real estate; personal, business, repair, and other services; field of economic activities: agriculture, forestry, fishing, hunting, and electric, gas, and sanitary services; wholesale and retail trade; finance, and public administration.

Principles of the Classification

In preparing the Classification, the Technical Committee on Industrial Classification was guided by the following general principles:

- (1) The Classification should conform to the existing structure
- Each establishment is to be classified according to its primary of American industry. 3
- nificant in the number of persons employed, the volume of business To be recognized as an industry, the group of establishments constituting the proposed classification must be statistically sigdone, and other measures of economic activity. ව

28

Structure of the Classification

analyze, and publish establishment data on a division, a two-digit, a threedigit, or a four-digit industry code basis, according to the level of indus-The structure of the classification makes it possible to tabulate, trial detail considered most appropriate.

Basis of Code Assignment

rarely possible to ottain this measure for individual products or services; be expected to give approximately the same results in determining "Le pritypically, it has been necessary to adopt some other criterion which may of products produced or distributed, or services rendered. Ideally, the Each establishment is assigned an industry code on the basis of its principal product or service should be determined by its relative share primary activity, which is determined by its principal product or group of "value added" at the establishment. In practice, however, it is mary activity of an establishment.

Use in Labor Market Survey

Industrial Classification System so that they can adapt the system to their This broader two-digit code can be directly related to vocational programs more detailed three or four digit code possible within the classification. as offered at the community college level. It is important however, that project coordinators seeking to implement the survey model described in Each company visited was assigned a two-digit code rather than the this document familiarize themselves with the details of the Standard own particular needs.

Standard Industrial Classification Manual - 1972, prepared by the Statistical Zu.S. Executive Office of the President, Office of Management and Budget, Policy Division.

Standard Industrial Classification Code

Employment Development Department (2-73) State of California

STANDARD INDUSTRIAL CODE

Two-Digit Industrial Code List

AG., FORESTRY & FISHERIES

- Agricultural Production

- Ag. Services & Hunting & Trapping 07

Fisheries 08 - Forestry 09 - Fisherie

MINING

10 - Metal

11 - Anthracite

12 - Bituminous & Lignite

13 - Crude Petroleum & Natural Gas

14 - Mining & Quarrying Nonmetallic Minerals, Except Fuels

CONTRACT CONST.

15 - Bldg. - General Contractors

16 - Const. other than Bldg. - Gen. Contractors

- Special Trade Contractors 17 - Const.

MANUFACTURING

19 - Ordnance & Accessories

- Food & Kindred Products

21 - Tobacco

Textile Mill Products

22 - Textile Mill Products 23 - Apparel & Other Finished Products made from Fabrics

and Similar Materials

- 24 Lumber & Wood Products, Except Furniture
 - 25 Furniture & Fixtures
- 6 Paper & Allied Products
- 27 Printing, Publishing & Allied Industries
 - . 28 Chemicals & Allied Products.
- 29 Petroleum Refining & Related Products
 - 30 Rubber & Misc. Plastics Products
 - 31 Leather & Leather Products
- 32 Stone, Clay & Glass Products
 - 33 Primary Metals Industries
- Fabricated Metal Products, Except Ordnance, Machinery & Trans. Equip.
 - 35 Machinery, Except Electrical
- 36 Electrical Machinery, Equipment & Supplies
 - 37 Transportation Equipment
- 38 Professional, Scientific & Controlling Instruments; Photographic & Optical Goods; Watches & Clocks
- 39 Misc. Mgf. Industries

TRANSP., COMM., ELECTRIC, GAS & SANITARY SERVICES

- 10 RR Transp.
- 4) Local & Suburban Transit & Interurban Passenger Transp.
 - 42 Motor Freight Transp. & Warehousing
 - 44 Water Transportation
- 5 Transportation by Air
- 46 Pipeline Transp.
- 47 Transp. Services
 - 48 Communication
- 3 Electric, Gas & Sanitary Services

WHOLESALE , ND RETAIL TRADE

- 50 Tholesale
- 2 'etail Bldg. Materials, Hardware & Farm Equipment
 - 53 Retail General Merchandise
- 54 Retail Food
- 55 Auto Dealers & Gasonine Serv. Stations
- 6 Retail Apparel & Accessories
- 57 Retail Furniture, Home Furn. & Equipment 58 - Retail - Eating & Drinking Places
 - 9 Retail Misc. Retail Stores

300

FINANCE, INSURANCE, & REAL ESTATE

- Banking

Credit Agencies other than Banks

62 - Security & Commodity Brokers, Dealers, Exchanges & Services

- Insurance Carriers 63

Insurance Agents, Brokers & Service

Real Estate - 59 Combinations of Real Estate, Insurance, Loans, Law Offices

- Holding & Other Investment Companies

SERVICES

- Hotels, Rooming Houses, Camps, & Other Lodging Places

72 - Personal Services

73 - Misc. Business Services

75 - Auto. Repair, Auto Services & Garages 76 - Misc. Repair Services

- Motion Pictures

- Amusement & Recreation Services, Except Motion Pictures

Medical & Other Health Services

- Legal Services

Educational Services

Museums, Art Gallerles, Botanical & Zoological Gardens

Nonprofit Membership Organizations

Private Households

- Misc. Services

COVERNMENT

91 - Federal 92 - State

93 - Local 94 - International

99 - Nonclassifiable Establishments

* Code Public Schools 92 or 93 as applicable.

G.4.6. List of Useful Data Available for All Counties

State of California - Employment Development Department information

- (Northern California Employment Data and Research, June 1973) Total Population of Planning Area with Annual Changes County Labor Market Survey - 1971-72
- Specialized Area Studies, such as the Tuolumne County Manpower Survey - October 1971 prepared by the Rural Manpower Service Office
- 3. Monthly Labor Market Reports
- 4. Semi-Annual Review and Outlook for area
- U.S. Department of Labor-Manpower Administration
- Summary of Manpower Indicators for each County Run date 11/02/72 Lawrence Berkeley Lab
- 2. Journey to work by residents according to census data
- U.S. Bureau of Census
- 1. County and City Data Book

Additional data can be secured by local Employment Development Department Once the local office contact has been made, the staff of this Managers through the Office of Northern California Employment Data and office are of invaluable assistance. Research.

G.4.7. Useful Manpower Projection Data

- U.S. Department of Labor, Bureau of Labor Statistics, The U.S. Economy in 1980, a summary of Bureau of Labor Statistics Projection Bulletin ij
- 2. State of California Employment Development Department



- a. California Manpower, 1972-75
- b. California Manpower Needs to 1975, October 1969
- Various reports on selected occupational areas are also available notably in Comprehensive Health Planning. m m

G.4.8. Work Sheets Utilized in Developing Implications

33

ANALYSIS OF LABOR MARKET SURVEY FOR TUOLUMNE COUNTY

The purpose of the following question was to help instructors analyze the Labor Market Survey data and draw program implications. These questions were prepared in a workbook fashion and from the responses the narrative report was developed. To the User:

Description of the Labor Market

Scope of Labor Market

ce

These job titles fell into 49 classifications During the period of the Tuolumne County Labor Market survey, approximately 1082 job assigned by the Standard Industrial Classification Manual, to group like industries. An analysis of job titles by industry types reveals that the largest number of job titles are found in the following industry types: titles were identified by interviewers.

Class

Title of Class

Number of Job Titles

Number of Jobs in Class

Summary information

completed by Project

Director

The largest number of jobs however, are found in the following job titles:

Job Title

DOT Classification

Number of Jobs in Title



Characteristics of Employers in Tuolumne County

This data from Table

completed by Project Summary information

Director

for each occupational will develop Tables The Project Staff area as follows:

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All job titles should appear in some program category which most nearly fits the college program offerings in vocational education. The Program Director was responsible to develop implications for those areas not taught by the college.

A number of xeroxed copies of these basic tables will be required to answer the questions which follow.

Using prepared Tables select the inservice job titles which your program now serves. Cut and tape.

C. Analysis of the Labor Market

- Relationship of current in-service training programs to the labor market ;
- achieved by existing course work at the college in the following Competence levels required for career advancement can be fully job titles 8

# OF JOBS	-			
ODE			-	
DOT CODE	_			
			-	·
JOB TITLE		 -		•

Other community based in-service courses outside college offerings are available to employees seeking career advancement **.** م

Check the

above.

Cut and tape, as

A.C.

appropriate type of training.

OTHER (specify)	
UNION OR PROFESSIONAL ORGANIZATION	
CORRESPONDENCE COURSES	
COMPANY OFFERED COURSES	36
COURSES OFFERED BY OTHER INSTITUTIONS	•
DOT	
OB ITLE	

Job Titles requiring four year degree or professional degree or for which selection is made outside the labor market area. ວ່

	 	 _
# OF JOBS		
30	 	
DOT CODE		
JOB TITLE	 	 -

following additions or modifications of existing course work are required. In order for opportunities for career advancement to be strengthened, the Ġ.

New course work to allow for career advancement is required as follows: e e

, C

f. Career level positions in which licensure is required:



Instructions

List title and codes.
Complete information on table.

•	Career	level	Career level positions in which licensure	ţp	which	licensure	e renewal carries	carries	s mandated
	continuin	ning ec	inuing education re	qui	on requirements.	· vi			

1	
SOURCE OF TRAINING	
FREQUENCY	¥
# MANDATED TRAINING HOURS	·
# YEARS FOR 1	
NAME OF 1	
DOT	
JOB TITLE	

Job titles for which advancement can be achieved through on-the-job training and formal training is not required. **.**

JOB TITLE	Α	DOT CODE	# OF JOBS
	3	_	
	-		-
,			
		_	
		_	
•			

38

- 2. Entry level jobs
- Relationship of current training to labor market
- Entry level competence can be fully achieved with existing course work ~

•	TOTAL
	CALAVERAS
	TUOLUMNE
	JOB TITLE
	DOT CODE

7

evel competence could be fully achieved with the following additions or stions of existing course work, as follows:	CONTENT AREA	one additional unit to Switchboard Operation course, Off. Occ. 131, train- ing in notetaking of messages; refering	THE COURT OF THE C
evel competence could be fully achieved with ations of existing course work, as follows:	JOB TITLE	Telephone Answer Serv	
2) Fntry lev modificat	DOT CODE	235862	

Entry competence would require new course work, as follows: e E

CONTENT AREA	e New Course - Medical receptionist and transcription techniques	
	Receptionist - Medical Office	
JOB TITLE	Receptionist -	
DOT CODE	237368	

*6*3

Entry level can be achieved through on-the-job training and formal training is not required. 4

TOTAL
CALAVERAS
TUOLUMNE
JOB TITLE
DOT CODE

- Career advancement within occupational categories **.**
- 1) have advancement possibilities

NEXT STEP JOB TITLE	Librarian
NEXT STEP DOT CODE	100168
DOT CODE	100168
JOB TITLE	Librarian Helper

2) are entry level only

JOB TITLE

DOT CODE 39

3) advancement requires leaving	JOB TITLE DOT (c. Describe the possibilities fo	1) within local businesses a	nia 1972-75 2) within specialties by cha	3) advancement requires las	d. List job titles which have po	e. Review current level of earnings	L 60	f. Review of characteristics of entry level jobs.	1) Program needs met in exis	Requires Formal Has Yi Training for Employ Tob Title Entry	 2) Entry level competence could be of	Requires Formal Has Y. Training for Employ	
ving the area	CODE DOT CODE	for advancement as follows:	and industries	changing employers	laving the area	possibilities for placement in br	for entry level jobs in	Sarnings Median Earnings Wage or Minimum Wage or Within 10% Above	f entry level jobs.	existing offerings	Has Yr-Round Pays Median Ha Employment Salary of Min. Ca Possibility Wage or Above Po	could be of existing course work, as	Has Yr-Round Pays Median H. Employment Salary of Min. C. Possibility Wage or Above P	
•	NEXT STEP JOB TITLE					in broader labor market.	categories listed below:	Median Earnings Minimum Wage Exceed- ing Above 10%		•	Has Local Has Expanded Career Possibility Possibility	, as following:	Has Local Has Expanded Career Possibility Possibility	

ERIC PROVIDED BY ERIC

3) Entry competence would require new courses

Has Expanded Career Possibility	
Has Local Career Possibility	
Pays Median Salary of Min. Wage or Above	
Has Yr-Round Employment Possibility	Jobs
Requires Formal Training for Entry	Seasonal and Year-Round Jobs
Job Title	ຕໍ
DOT Code	•

The seasonal and year-round characteristics of the local labor market. а •

Seasonal jobs by month of work 7

List.

		MAR		
	-	FEB.		
		JAN.	-	
		DEC.		
		NOV.		
		OCT.	•	
		SEPT. OCT.	X	•
NTH CALENDAR FOR SEASONAL JOBS		MAY JUNE JULY AUG.	X	
EASONA		7105		
FOR S		JONE JONE	x	
LENDAR	***	MAI		
NTH CA	40.0	1 T		
15-70	<u>9</u> ≥	1 2		
	r r g			
DOT	TAN			
	TITLE		Constr. Inspector	-
TOT	CODE		182287	

		LESS SEASONAL			-
		MORE SEASONAL			l el jobs?
X .	ا areer level jobs:	SAME DEGREE OF SEASONALITY			Is the seasonal calendar the same as for entry level jobs? If different, how?
×	 parison of entry jobs with career level jobs	SEASONALITY NOT FOUND YEAR-ROUND	ONE		, l calendar the sa how?
	parison of	DOT	-		the seasonal cadifferent, how?
	21 Comp.	JOB TITLE			3) Is t If d
LOZZO/ CONSTI. Inspector		•			evel
70770	AS;			Instructions	Add career level jobs to entry

4) Implications of seasonal calendar for in-service training class offerings.

level seasonal calendar, and

compare.

Cut and tape titles.

Check appropriate column.

	bilities.	ADVANCEMENT REQUIRES LEAVING AREA	·
	dvancement possi	WITHIN SPECIALITY BY CHANGING EMPLOYERS	
Advancement tles have career adv	The following job titles have career advancement possibilities.	WITHIN LOCAL BUSINESS AND INDUSTRY	
for Caree	ring job t	DOT	
Opportunities for Career Advancement	1) The follow	JOB TITLE	
ъ.			•

Program implications derived from information pertaining to established career level jobs. ပ

1.4

(attachment) Anticipated trends in State and National labor markets. р

Characteristics of the Tuolumne County Labor Market

ė

The characteristics of the labor market will be described by two job classifications entry level jobs and established career level jobs.

The scope and characteristics of the established career level positions are also important as they govern the in-service It is from these The location, number, work calendar, and type of entry level jobs are of primary concern to the pre-service or pre-employment education programs of the College. programs that placements of cntry level workers will occur. training programs to be taught by the College. The information included in these sections was developed through the following analysis of

- Characteristics of the labor market for which certificate and/or degree programs are now offered by the college. ;
- Characteristics of the labor market for which instructional programs do not exist. 7
- Job titles and occupational clusters with potential for future program development. а •
- Job titles and occupational clusters for which training programs are not now recommended. **.**

UNIVERSITY OF CALIF.
LOS ANGELES

Jul 25 1975

CLEARINGHOUSE FOR JUNIOR COLLEGE INFORMATION

